



RECEIVED

SEP 23 2002

TECH CENTER 1600/2900

SEQUENCE LISTING

<110> DANIELL, HENRY

<120> GENETIC ENGINEERING OF COTTON TO INCREASE FIBER
STRENGTH, WATER ABSORPTION AND DYE BINDING

<130> 1483-R-00

<140> 09/251,638

<141> 1999-02-17

<150> 60/074,997

<151> 1998-02-17

<160> 25

<170> PatentIn Ver. 2.1

<210> 1

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 1

Val Pro Gly Val Gly
1 5

<210> 2

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 2

Gly Val Gly Val Pro
1 5

<210> 3

<211> 605

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<400> 3

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
1 5 10 15

Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val

20						25						30					
Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly		
		35						40						45			
Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly			
		50						55						60			
Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val			
		65			70						75			80			
Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro			
					85						90			95			
Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly			
					100						105			110			
Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val			
		115						120						125			
Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly			
		130						135						140			
Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val			
		145			150						155			160			
Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro			
					165						170			175			
Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly			
					180						185			190			
Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val			
		195						200						205			
Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly			
		210						215						220			
Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val			
		225			230						235			240			
Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro			
					245						250			255			
Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly			
					260						265			270			
Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val			
		275						280						285			
Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly			
		290						295						300			
Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val			
		305			310						315			320			
Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro			
					325						330			335			
Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly			
					340						345			350			

Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
 355 360 365
 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
 370 375 380
 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
 385 390 395 400
 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
 405 410 415
 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
 420 425 430
 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
 435 440 445
 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
 450 455 460
 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
 465 470 475 480
 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
 485 490 495
 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
 500 505 510
 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
 515 520 525
 Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
 530 535 540
 Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
 545 550 555 560
 Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
 565 570 575
 Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
 580 585 590
 Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
 595 600 605

<210> 4

<211> 100

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 4

Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly

1	5	10	15
Val Gly Val	Pro Gly Val Gly Val	Pro Gly Val Gly Val	Pro Gly Val
	20	25	30
Gly Val	Pro Gly Val Gly Val	Pro Gly Val Gly Val	Pro Gly Val Gly
	35	40	45
Val Pro Gly Val Gly Val	Pro Gly Val Gly Val	Pro Gly Val Gly Val	
	50	55	60
Pro Gly Val Gly Val	Pro Gly Val Gly Val	Pro Gly Val Gly Val	Pro
	65	70	75
Gly Val Gly Val	Pro Gly Val Gly Val	Pro Gly Val Gly Val	Pro Gly
	85	90	95
Val Gly Val	Pro		
	100		

<210> 5
 <211> 605
 <212> PRT
 <213> Artificial Sequence

<220>
 <221> repeat_unit
 <222> 1..605
 <223> Repeats at least once

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 5
Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
1 5 10 15
Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
20 25 30
Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
35 40 45
Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val
50 55 60
Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro
65 70 75 80
Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly
85 90 95
Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val
100 105 110
Gly Val Pro Gly Val Gly Val Pro Gly Val Gly Val Pro Gly Val Gly
115 120 125

Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	130	135	140
Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	145	150	155
Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	165	170	175
Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	180	185	190
Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	195	200	205
Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	210	215	220
Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	225	230	235
Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	245	250	255
Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	260	265	270
Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	275	280	285
Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	290	295	300
Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	305	310	315
Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	325	330	335
Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	340	345	350
Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	355	360	365
Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	370	375	380
Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	385	390	395
Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	405	410	415
Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	420	425	430
Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	435	440	445
Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val			

450					455					460					
Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro
465					470					475					480
Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly
				485					490					495	
Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val
			500					505					510		
Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly
		515					520				525				
Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val
	530					535				540					
Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro
545					550					555					560
Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly
				565					570					575	
Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val
			580					585					590		
Gly	Val	Pro	Gly	Val	Gly	Val	Pro	Gly	Val	Gly	Val	Pro			
	595					600					605				